

*FIG. 1*

(PRIOR ART)

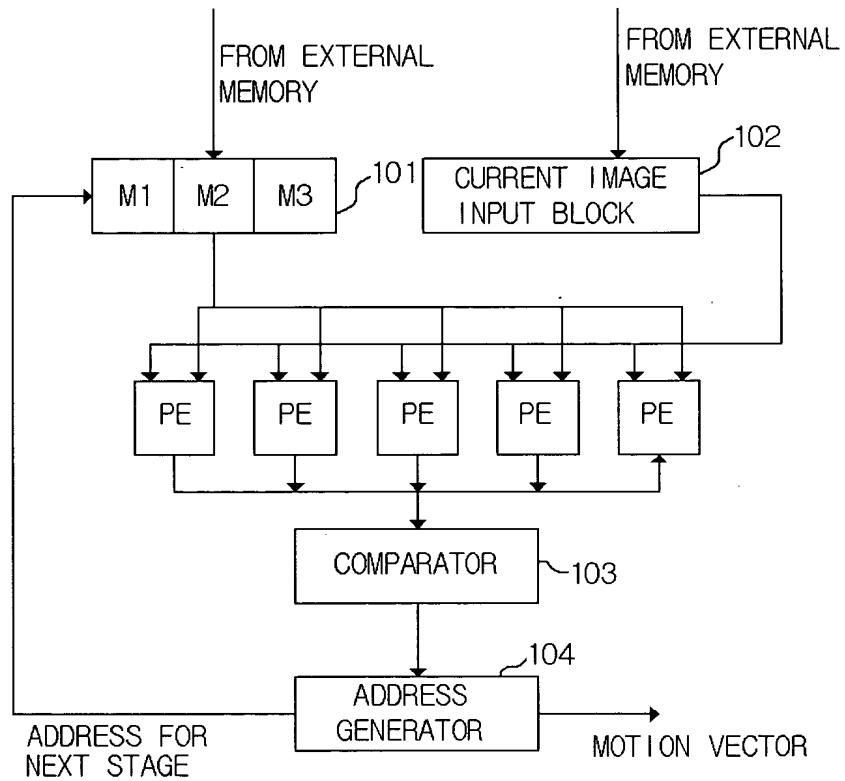
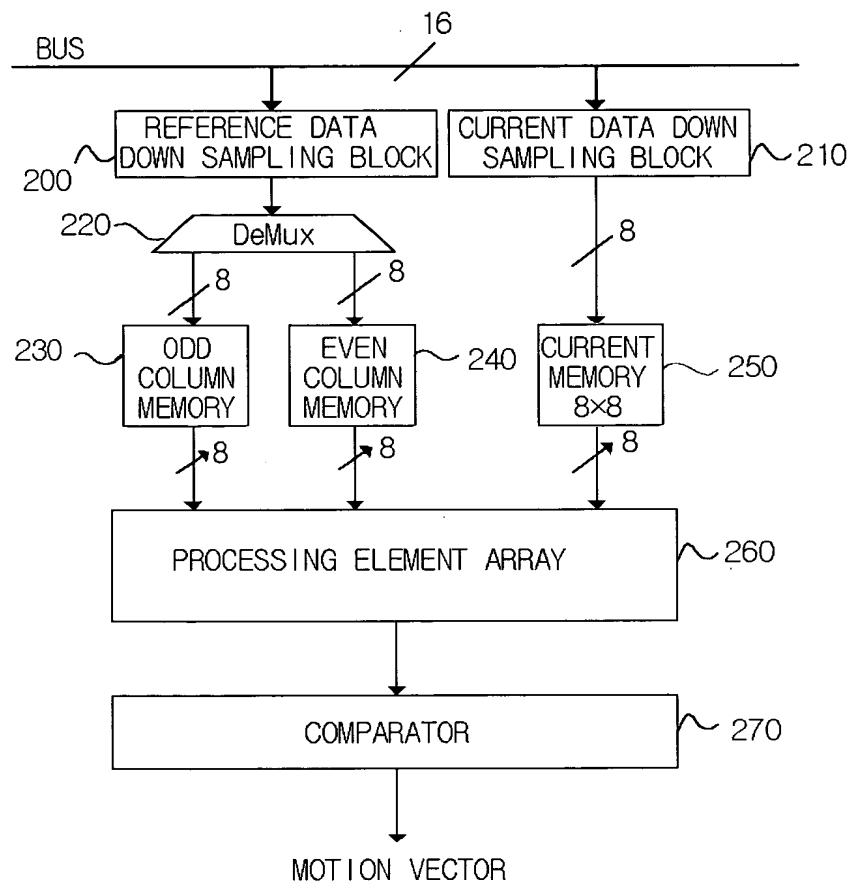
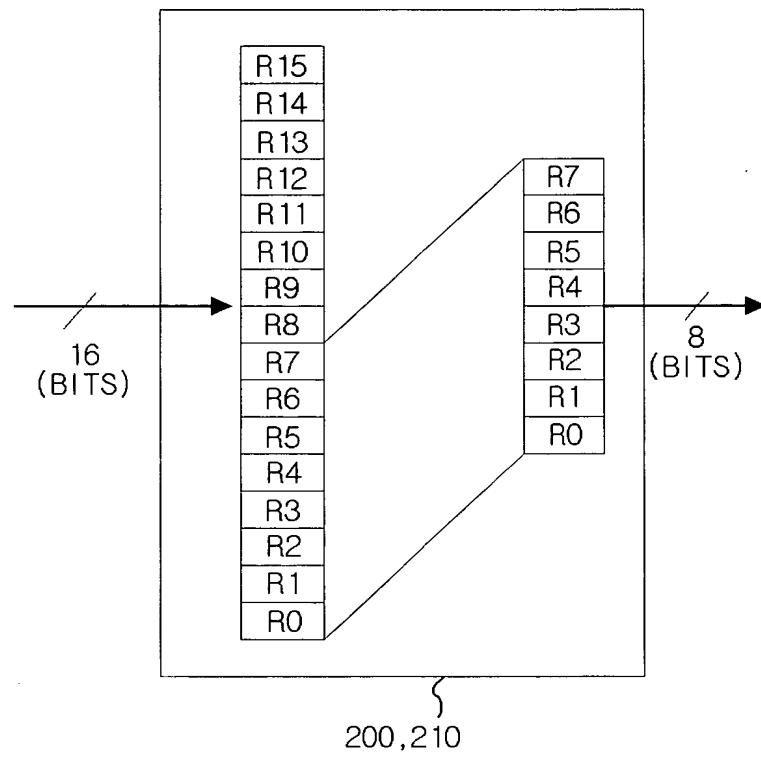


FIG. 2



*FIG. 3*

REFERENCE AND CURRENT DATA DOWN SAMPLING



09694153-043001

FIG. 4

SEARCH MEMORY ADDRESS ODD MAPPING

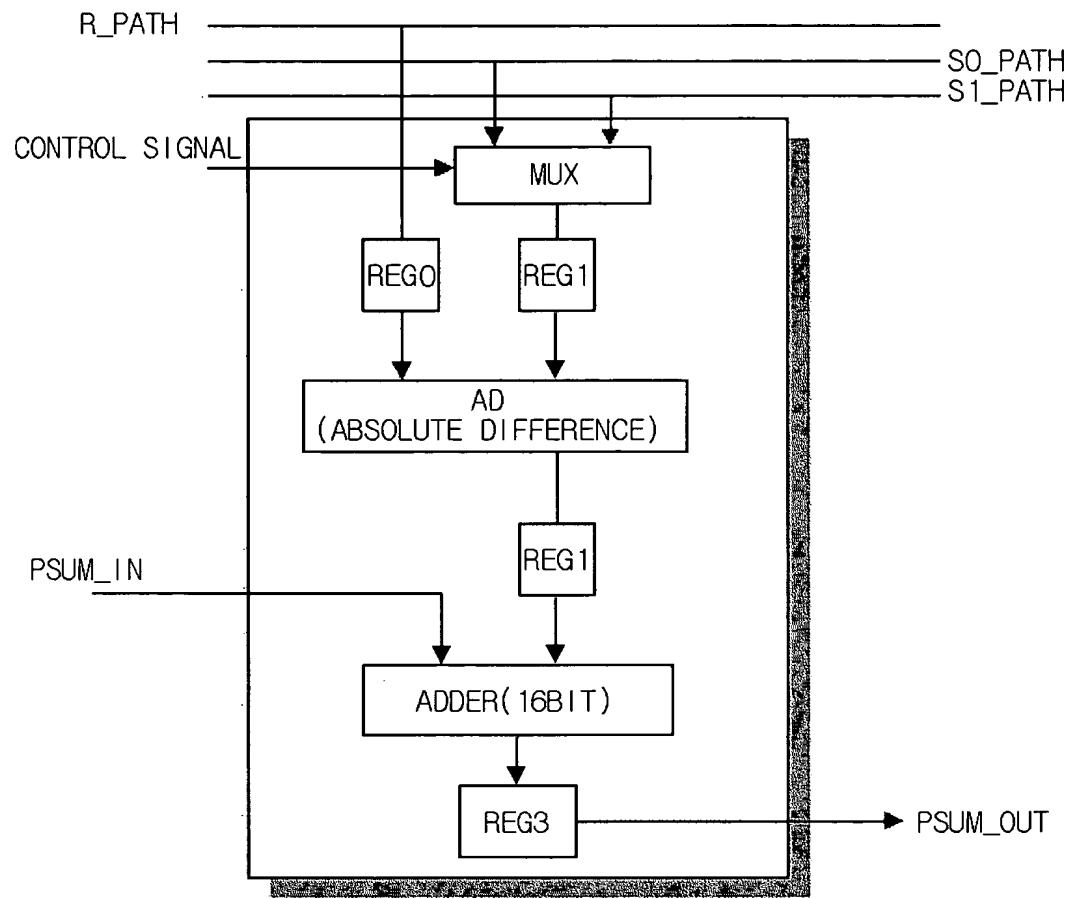
Diagram illustrating the search memory address for odd mapping. The 24-bit address is mapped to a 24-bit memory location. The address is divided into 8-bit fields (0-7, 8-15, 16-23) and 12-bit fields (24-31, 32-40, 41-47, 48-56, 57-64, 65-71, 72-80, 81-87, 88-95, 96-104, 105-128, 129-152, 153-175, 176-183, 184-191, 192-216, 217-240, 241-264, 265-287). A 23-bit offset is shown mapping to an 8-bit memory location (0, 24, EVEN, ODD, EVEN, ODD, EVEN, ODD).

SEARCH MEMORY ADDRESS EVEN MAPPING

Diagram illustrating the search memory address for even mapping. The 24-bit address is mapped to a 24-bit memory location. The address is divided into 8-bit fields (0-7, 8-15, 16-23) and 12-bit fields (24-31, 32-40, 41-47, 48-56, 57-64, 65-71, 72-80, 81-87, 88-95, 96-104, 105-128, 129-152, 153-175, 176-183, 184-191, 192-216, 217-240, 241-264, 265-287). A 575-bit offset is shown mapping to an 8-bit memory location (552, 575, EVEN, ODD, EVEN, ODD, EVEN, ODD).

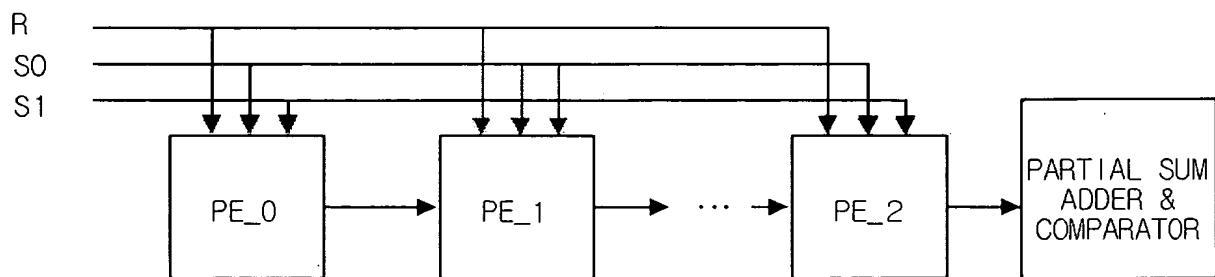
09846153 043001

FIG. 5A



00000000000000000000000000000000

FIG. 5B



*FIG. 6*

QCIF(11x9)  
SEARCH REGION MEMORY WRITE MAP  
PREFPELINE "A" WRITE, (0,0) PIPELINE "B" WRITE, OTHERS "C" WRITE  
READ A->B->C

	0	1	2	3	4	5	6	7	8	9	10	NEXT ROW WRITE
0	A B C	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	
1	B C A	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	
2	C A B	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	
3	A B C	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	
4	B C A	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	
5	C A B	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	
6	A B C	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	
7	B C A	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	
8	C A B	C A B	B C A	A B C	C A B	B C A	A B C	C A B	B C A	A B C	C A B	

FIG. 7

